

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 2000003947
PUBLICATION DATE : 07-01-00

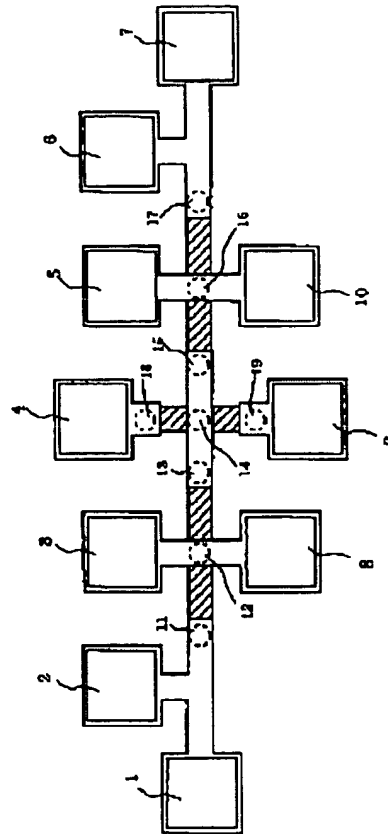
APPLICATION DATE : 15-06-98
APPLICATION NUMBER : 10166508

APPLICANT : NEC CORP;

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INT.CL. : H01L 21/66 G01R 31/28 H01L 21/768

TITLE : SEMICONDUCTOR DEVICE FOR
ELECTROMIGRATION TEST



ABSTRACT : PROBLEM TO BE SOLVED: To decrease the temperature gradient of a wiring and to easily locate voids in an electromigration reliability test.

SOLUTION: When a stress current is applied through stress current applying pads 1 and 7, heat released from a tested wiring layer is dissipated through the stress current applying pads 1 and 7, resistance measuring edge pads 2 and 6, and heat dissipating/resistance measuring pads 3, 4, 5, 8, 9, and 10. By this setup, a temperature gradient generated by a usual structure where heat is dissipated through only the stress current applying pads 1 and 7 located at the edges of the tested wiring layer is lessened. When or after a stress current is applied, a resistance between the heat dissipating/resistance measuring pads 3, 4, 5, 8, 9, and 10 is measured, whereby a resistance change in the tested wiring layer can be partially investigated. Spots where voids are generated are increased in resistance, so that voids can be easily located.

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- keine homogene T-Verteilung!